

10/518882
DT01 Rec'd PCT/PT 20 DEC 2004

Amendments to the Claims

1. (currently amended): Polyolefin compositions comprising (percent by weight):
 - 1) 55-80% of a crystalline propylene homopolymer or copolymer containing up to 15% of at least one of ethylene and and/or C₄-C₁₀ α-olefin(s) and having a an-MFR value (230 °C, 2.16 kg) of at least 15 g/10 min; and
 - 2) 20-45% of a copolymer of ethylene with at least one of one or more C₄-C₁₀ α-olefin(s) containing from 10 to 40% of said C₄-C₁₀ α-olefin(s); said compositions having values of MFR (230 °C, 2.16 kg) values of at least equal to or higher than 15 g/10 min, a total content of ethylene of 20% or more, a total content of C₄-C₁₀ α-olefin(s) of 4.5% or more, a ratio of the total content of ethylene to the total content of C₄-C₁₀ α-olefin(s) of 2.3 or more, and an intrinsic viscosity value of a the fraction soluble in xylene at room temperature of at most 1.7 dl/g-~~or less~~.
2. (currently amended): The polyolefin compositions according to claim 1 comprising (percent by weight):
 - 1) 55-75%, ~~preferably 55-70%~~, of a crystalline propylene homopolymer or copolymer containing up to 15% of at least one of ethylene and and/or C₄-C₁₀ α-olefin(s) and having a an-MFR value of from 15 to 80 g/10 min; and
 - 2) 25-45%, ~~preferably 30-45%~~, of a copolymer of ethylene with at least one of one or more C₄-C₁₀ α-olefin(s) containing from 20 to 40% of said C₄-C₁₀ α-olefin(s); said compositions having values of MFR (230 °C, 2.16 kg) values at least equal to or higher than 15 g/10 min, a total content of ethylene of 20% or more, a total content of C₄-C₁₀ α-olefin(s) of 6% or more, a ratio of the total content of ethylene to the total content of C₄-C₁₀ α-olefin(s) of 2.3 or more, a total fraction soluble in xylene at room temperature of 18 wt% or higher, and an intrinsic viscosity value of the fraction soluble in xylene at room temperature of at most 1.7 dl/g-~~or less~~.
3. (currently amended): The polyolefin compositions of claim 1, having MFR values of at least equal to or higher than 30 g/10 min.

4. (original): The polyolefin compositions of claim 1, wherein the intrinsic viscosity of the fraction soluble in xylene at room temperature is in the range from 0.8 to 1.5 dl/g.
5. (currently amended): The polyolefin compositions of claim 1, wherein the fraction content of polymer soluble in xylene at room temperature is higher than 20%.
6. (currently amended): The polyolefin compositions of claim 1, having a ductile/brittle transition temperature of at most equal to or lower than -35 °C.
7. (currently amended): A process for producing the polyolefin compositions, which comprise:
 - 1) 55-80% of a crystalline propylene homopolymer or copolymer containing up to 15% of at least one of ethylene and C₄-C₁₀ α-olefin(s) and having a MFR value (230 °C, 2.16 kg) of at least 15 g/10 min; and
 - 2) 20-45% of a copolymer of ethylene with at least one of C₄-C₁₀ α-olefin(s) containing from 10 to 40% of said C₄-C₁₀ α-olefin(s);
said compositions having MFR (230 °C, 2.16 kg) values at least 15 g/10 min, a total content of ethylene of 20% or more, a total content of C₄-C₁₀ α-olefin(s) of 4.5% or more, a ratio of the total content of ethylene to the total content of C₄-C₁₀ α-olefin(s) of 2.3 or more, and an intrinsic viscosity value of a fraction soluble in xylene at room temperature of at most 1.7 dl/g, of claim 1, the process being carried out in at least two sequential steps, wherein in at least one polymerization step the relevant monomer(s) are polymerized to form component 1) and in the other step the relevant monomers are polymerized to form component 2), operating in each step, except the first step, in the presence of the polymer formed and the catalyst used in the preceding step.
8. (currently amended): The process of claim 7, 6, wherein the polymerization catalyst is a stereospecific Ziegler-Natta catalyst comprising, as catalyst-forming components, a solid component comprising a titanium compound having at least one titanium-halogen bond and an electron-donor compound, both supported on a magnesium halide in active form, and an organoaluminum compound.
9. (currently amended): The process of claim 7, 6, wherein both components 1) and 2) are prepared in gas phase.

10. (currently amended): Injection moulded articles comprising the polyolefin compositions, which comprise: of claim 1.
- 1) 55-80% of a crystalline propylene homopolymer or copolymer containing up to 15% at least one of ethylene and C₄-C₁₀ α-olefin(s) and having a MFR value (230 °C, 2.16 kg) of at least 15 g/10 min; and
 - 2) 20-45% of a copolymer of ethylene with at least one of C₄-C₁₀ α-olefin(s) containing from 10 to 40% of said C₄-C₁₀ α-olefin(s); said compositions having MFR (230 °C, 2.16 kg) values at least 15 g/10 min, a total content of ethylene of 20% or more, a total content of C₄-C₁₀ α-olefin(s) of 4.5% or more, a ratio of the total content of ethylene to the total content of C₄-C₁₀ α-olefin(s) of 2.3 or more, and an intrinsic viscosity value of a fraction soluble in xylene at room temperature of at most 1.7 dl/g.
11. (new): The polyolefin compositions according to claim 2 comprising (percent by weight):
- 1) 55-70% of a crystalline propylene homopolymer or copolymer containing up to 15% of at least one of ethylene and C₄-C₁₀ α-olefin(s) and having a MFR value of from 15 to 80 g/10 min; and
 - 2) 30-45% of a copolymer of ethylene with at least one of C₄-C₁₀ α-olefin(s) containing from 20 to 40% of said C₄-C₁₀ α-olefin(s); said compositions having values of MFR (230 °C, 2.16 kg) equal to or higher than 15 g/10 min, a total content of ethylene of 20% or more, a total content of C₄-C₁₀ α-olefin(s) of 6% or more, a ratio of the total content of ethylene to the total content of C₄-C₁₀ α-olefin(s) of 2.3 or more, a total fraction soluble in xylene at room temperature of 18 wt% or higher, and an intrinsic viscosity value of a fraction soluble in xylene at room temperature of at most 1.7 dl/g.